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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,942	03/24/2004	Kristof Chwalisz	ABB01259P00381US (7348.US)	5147
7590 08/05/2008 TAP Pharmaceutical Products, Inc. Attention: Mark J. Buonaiuto 675 North Field Drive Lake Forest, IL 60045				
EXAMINER				
CHUI, MEI PING				
ART UNIT		PAPER NUMBER		
1616				
MAIL DATE		DELIVERY MODE		
08/05/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/807,942

Applicant(s)

CHWALISZ, KRISTOF

Examiner

MEI-PING CHUI

Art Unit

1616

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 1-10, 14 and 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date N/A.

DETAILED ACTION

Status of Action

Receipt of Amendments/Remarks filed on 05/10/2008 is acknowledged. Claims 11-13 are currently presented, claims 1-10 and 14-15 have been withdrawn.

Status of Claims

Accordingly, claims 11-13 are presented for examination on the merits for patentability.

Comment: In claim 13, the term “---17-x-mrtho-xymethyl)estra---” should be “-“---17-
 α -(methoxymethyl)estra---”. Applicant is required to correct the typographical error.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeManno et al. (Steroids 2003, 68:1019-1032) in view of Chwalisz et al. (WO 01/26603), and further in view of Apgar et al. (American Family Physician: published on 10/15/2000 and retrieved online on 12/12/2007 via www.aafp.org/afg/20001015/1839.html) and Winkley, M. W. (U. S. Patent No. 5,523,427).

Applicant Claims

Applicants claim a method of treating a gynecological disorder comprising the step of administering a selective progesterone receptor modulator (SPRM) to achieve a therapeutic effect, follows by the administering a progestogen to induce a predictable return to menstruation, wherein (i) the gynecological disorder is uterine fibroids, endometriosis, hormone replacement therapy, menorrhagia, and recited therein in the claims; (ii) the dosage period for SPRM is between about 1 months to 12 months, the dosage period for progestogen is between 1 day to 31 days; and (iii) the SPRM is asoprisnil (also known as J867), J912 or J956.

Determination of the scope and content of the prior art (MPEP 2141.01)

DeManno et al. teach that asoprisnil (J867) is a selective progesterone receptor modulator, which can be used to treat gynecology disorder, i.e. endometriosis (page 1119, Introduction: 4-6).

DeManno et al. teach that a 39-weeks oral study of asoprisnil treatment demonstrated that asoprisnil completely suppress the proliferation of endometrial and, as a result, induces amenorrhea in all asoprisnil doses used in the treatment (page 1031, right column, line 20-23).

DeManno et al. also teach that SPRM(s), i.e. asoprisnil, is also effective in suppressing the over production of uterine prostaglandin in the endometrium, which is the cause for the uterine pain or dysmenorrheal (page 1031, left column, line 31-36).

DeManno et al. also teach that asoprisnil is useful for treating various gynecological disorders, i.e. uterine fibroids, endometriosis, dysmenorrheal (uterine pain) while the treatment may induce amenorrhea (page 1031, right column, Clinical Implications: line 1-13).

DeManno et al. further teach that 10 to 25 mg of asoprisnil is effective in shrinking uterine fibroids, reducing symptoms, and suppressing both normal and abnormal uterine bleeding, i.e. menorrhagia (page 1032, left column, line 11-14).

***Ascertainment of the difference between the prior art and the claims
(MPEP 2141.02)***

DeManno et al. do not teach the use of a progestin for restoring menstrual bleeding in a patient after being treated with a SPRM. However, the deficiency in DeManno et al. are cured by combining the teachings of Chwalisz et al., Apgar et al. and Winkley, M. W.

Chwalisz et al. teach the use of mesoprogesterin, i.e. J867 or known as asoprisnil, J912 or J956, as a component for the production of a pharmaceutical female contraception (page 14, claims 1, 8 and page 10, line 5). Chwalisz et al. teach that the mesoprogesterin component can be used sequentially with a progestin in said regimen, wherein the mesoprogesterin component is

administered for a period of 1-30 days and the progestin component is administered for a period of 30-180 days (page 5, line 5-9). Chwalisz et al. also teach that menstrual bleeding may or may not occur during mesoprogesterin treatment, however, the use of a progestin in said sequential treatment can regulate the menstrual bleeding to a less unscheduled manner (page 5, line 10-12).

Chwalisz et al. teach when mesoprogesterin is continuously administered alone, in a dosage unit of 1 to 25 mg per day, up to 180 days, it not only provides contraceptive effect by suppressing the lining of the uterus and preventing nidation, but also induces a reversible amenorrhea (page 3, line 20-26; page 4, line 24-26 and page 13, line 3-5). Chwalisz et al. also teach that mesoprogesterin can be continuously administered, alone, more than 3 months, i.e. 1 year or 12 months, to suppress endometrial growth while a reversible amenorrhea (page 4, line 5-8) condition is maintained.

Apgar et al. teach that progestational agents, or so called progestogens, have been used successfully to induce withdrawal bleeding in women with oligomenorrhea or secondary amenorrhea, wherein said progestin, i.e. medroxyprogesterone acetate, is commonly used (page 3, section of Using progestational Agents in Clinical Practice, line 1-4).

Apgar et al. teach that the progestational agent, i.e. medroxyprogesterone acetate, produces predictable withdrawal bleeding of an estrogen-primed endometrium and a short period of oral administration of medroxyprogesterone acetate, i.e. 5 mg twice per day for 5 day, have produced withdrawal bleeding in 93 % of amenorrheic women (page 3, section of Using progestational Agents in Clinical Practice: line 8-15). Apgar et al. also teach that study showed oral micronized progesterone in an amount of 300 mg per day produced withdrawal bleeding in

90 % of women with oligomenorrhea or amenorrhea (page 3, section of Using progestational Agents in Clinical Practice: line 16-20).

Winkley, M. W. teaches that medrogestone is a known progesterone which is useful for inducing and reestablishing normal menstrual cycles due to secondary amenorrhea (column 1, line 10-13). Winkley, M. W. also teaches that medrogestone can assure regular endometrial shedding and in arresting and controlling dysfunctional uterine bleeding, i.e. menorrhagia or metroorrhagia (column 1, line 14-16).

Winkley, M. W. further teaches that the dosage requirement of medrogestone may vary with the route of administration and the severity of the symptoms presented, and that can be determined by a physician based on experience with the individual subject being treated (column 6, line 66-67 and column 7, line 11-12).

Finding of prima facie obviousness Rational and Motivation

(MPEP 2142-2143)

It would have been obvious to a person of ordinary skilled in the art at the time the invention was made to combine the teachings of DeManno et al. and Chwalisz et al., and utilize a SPRM to treat gynecological disorders, and further combine the teaching of Apgar et al. and Winkley, M. W., and administer a progestogen to reverse the amenorrhea condition brought about by the SPRM treatment, to produce the instantly claimed invention.

One of ordinary skill would have been motivated to do this because it is known in the art that administration of SPRMs cause amenorrhea and it is also taught in the art to administer a progestogen to reverse amenorrhea. Furthermore, the art, namely Chwalisz et al., already

establish the concept of sequential administration of mesoprogesterone and progesterone. Therefore, the Examiner can only conclude that it would be obvious to administer a progesterone to reverse the amenorrhea caused by administration of the SPRM in the treatment of a gynecological disorder. The period of administration of the progesterone is merely judicious selection and routine optimization of the periods taught by Chwalisz et al., and Apgar et al. and Winkley, M. W. which would also be dependent on the patient.

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

The previous rejection with respect to claims 11-13, under 35 U.S.C. 103(a) as being unpatentable over DeManno et al. (Steroids 2003, 68:1019-1032) in view of Chwalisz et al. (WO 01/26603), and further in view of Apgar et al. (American Family Physician: online on 12/12/2007 via www.aafp.org/afg/20001015/1839.html) and Winkley, M. W. (U. S. Patent No. 5,523,427), is **maintained.**

Response to Arguments

Applicant's arguments filed on 05/10/2008 have been fully considered but they are not persuasive.

Applicant argues that each of these prior art references specifically for the isolated use of a selective progesterone receptor modulator (SPRM) or the isolated use of progestin for inducing withdrawal bleeding or for sequential dosing regimen for female contraception. Therefore, none of these references in combination with one another suggest the instant claimed invention that provides a dosing regimen having a first dosing period of SPRM treatment to achieve a therapeutic effect with amenorrhea condition is being induced during the treatment. Applicant also argues that the instantly claimed invention comprises a second dosing period of progestin treatment, which is followed by the SPRM treatment, is used to reestablish a predictable withdrawal bleeding condition in the endometrium (menstruation) so that undesirable changes in the endometrium can be prevented (see Remarks: page 6, lines 23-32). Therefore, the instantly claimed invention would not have been obvious in view of the cited references because there is no suggestion by any of the references that sequential dosage of progestin following administration of an SPRM could be used as part of a therapeutic regimen to treatment of gynecological disorders (see remarks: page 7, lines 4-22).

In response to applicant's argument that none of the cited prior art references in combination with one another suggest the instant claimed invention that provides a sequential dosage of progestin following administration of an SPRM, which could be used as part of a therapeutic regimen to treatment of gynecological disorders.

Although the prior art, namely Chwalisz et al., Apgar et al. and Winkley et al., do not expressly teach a method of treating a gynecological disorder, there is no requirement that an "express" written motivation to combine must appear in prior art reference(s) before finding of obviousness. On the contrary, the motivation to combine prior art references may exist in the

nature of the problem to be solved or the knowledge of one of ordinary skill in the art (see MPEP 2145). In the instant case, the primary prior art reference DeManno et al. teach that asoprisnil (J867) is a selective progesterone receptor modulator (SPRM), which can be used to treat gynecology disorders, i.e. endometriosis, uterine fibroids or dysmenorrheal (uterine pain) while the treatment may also induce amenorrhea condition.

The secondary prior art reference, namely Chwalisz et al., teach using mesoprogesterin, such as J867 (also known as asoprisnil), J912 or J956, as a component for female contraception. Chwalisz et al. also teach that menstrual bleeding may not occur during mesoprogesterin treatment; however, the use of a progestin can regulate the menstrual bleeding to a less unscheduled manner, which implying the menstrual bleeding can be regulated to a more scheduled or predictable manner. In addition, Chwalisz et al. has taught that the progestin can be used sequentially with the mesoprogesterin, or the progestin can be used in combination with the mesoprogesterin in a composition (page 5, lines 5-12 and 21-22).

More specifically, Chwalisz et al. teach that when 1 to 25 mg per day of mesoprogesterin is continuously administered alone for more than 3 months, i.e. 1 year, it suppresses the lining of the uterus and induces a reversible amenorrhea, where the reversible amenorrhea condition is maintained as long as the endometrial growth is suppressed (page 3, lines 20-26; page 4, lines 24-26; page 13, lines 3-5 and page 4, lines 5-8). Therefore, it is clear that Chwalisz et al. has already established the concept of sequential administration of mesoprogesterin and progestin.

The additional prior art references, namely Apgar et al. and Winkley, M. W., are included to establish that progesterones have been known in the art for their capability of producing predictable withdrawal bleeding or reestablishing normal menstrual cycles due to secondary

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amenorrhea. For example, Apgar et al. teach that the progestational agent, i.e. medroxyprogesterone acetate, produces predictable withdrawal bleeding of an estrogen-primed endometrium and a short period of oral administration of medroxyprogesterone acetate, i.e. 5 mg twice per day for 5 day, have produced withdrawal bleeding in 93 % of amenorrheic women (page 3, section of Using progestational Agents in Clinical Practice: line 8-15). In addition, Winkley, M. W. teaches that medrogestone (a known progesterone) can assure regular endometrial shedding and in arresting and controlling dysfunctional uterine bleeding, i.e. menorrhagia or metrooohagia (column 1, line 14-16). Winkley, M. W. also teaches that the dosage requirement of medrogestone may vary with the route of administration and the severity of the symptoms presented, and that can be determined by a physician based on experience with the individual subject being treated (column 6, line 66-67 and column 7, line 11-12).

Therefore, the Examiner can only conclude that Applicant's argument is not persuasive and the combined teachings of the prior art references are remain obvious for one of ordinary skill in the art to administer a progestogen to reverse the amenorrhea condition caused by administration of the SPRM in the treatment of a gynecological disorder. The period of administration of the progestogen is merely judicious selection and routine optimization of the periods taught by Chwalisz et al., and Apgar et al. and Winkley, M. W. which would also be dependent on the patient.

From the teachings of the references, it would have been that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill

in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Conclusion

No claims are allowed.

THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication from the Examiner should direct to Helen Mei-Ping Chui whose telephone number is 571-272-9078. The examiner can normally be reached on Monday-Thursday (7:30 am – 5:00 pm). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Johann Richter can be reached on 571-

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272-0646. The fax phone number for the organization where the application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either PRIVATE PAIR or PUBLIC PAIR. Status information for unpublished applications is available through PRIVATE PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the PRIVATE PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Johann R. Richter/

Supervisory Patent Examiner, Art Unit 1616